

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/36916

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : B65D 81/00; A01N 1/00; A61K 35/52 US CL : 600/573; 435/2, 307.1; 206/524.1, 525, 527 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 600/573; 435/2, 307.1; 206/524.1, 525, 527 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,961,503 A (SIMMET et al) 05 October 2005 (05.10.2005), whole document, especially col. 2-4 and Fig. 3.	1-10, 25-27, 32-39, 52, 55, 56, 82 ----- 12-15, 17 and 28-31
X --- Y	US 4,690,678 (DOUGLASS-HAMILTON) 01 September 1987 (01.09.1987), see whole document and Figs. 1 and 4.	1-10, 25, and 32-39 ----- 19-24, 28-31 and 57
Y	US 6,493,884 B1 (MULLER et al) 17 December 2002 (17.12.2002), whole document, especially col. 2, ln 6-18.	28-31
X --- Y	US 5,569,225 A (FLEURY) 29 October 1996 (29.10.1996), see whole document and Fig. 1.	1-5, 11, 25-27, 32-39, 50-54 and 82 ----- 12-15 and 18
Y	US 2001/0044087 A1 (KONTOS) 22 November 2001 (22.11.2001), see abstract and Fig. 1.	14, 15, 17 and 18
X, E	US 6,864,046 B1 (PRIEN et al) 08 March 2005 (08.03.2005), whole document, especially Fig. 2.	1-39, 41, 42, 50-57 and 82
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
03 October 2005 (03.10.2005)	14 NOV 2005	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Michael Wityshyn <i>J. Roberts for</i> Telephone No. 571-272-1600	

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/36916

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-39, 50-57 and 82

- Remark on Protest**
- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/36916

## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003/0148365 A1 (MORGAN) 07 August 2003 (07.08.2003), whole document.	1
A	US 5,055,411 (ERICSSON et al) 08 October 1991 (08.10.1991), whole document.	74

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/36916

### BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-39, 50-57 and 82, drawn to a device for the collection of semen, comprising a collection container.

Group II, claim(s) 1, 40-49, drawn to a device for the collection of semen, comprising a collection container and an adapter section.

Group III, claim(s) 58-73, drawn to a method for collecting semen from a male.

Group IV, claim(s) 74-81 and 83, drawn to a kit for the analysis of a semen sample.

Group V, claims 84-89, drawn to a method for analyzing a semen sample.

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The inventions listed as Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature which links Group I (claims 1-39, 50-57 and 82), Group II (claims 1 and 40-49) and Group III (claims 58-73) is determined to be a semen collecting device. Claim 1, at least, is anticipated or obvious over Morgan (US 2003/0148365 A1). Morgan teaches a semen collection device (See Pg. 2, paragraph 0036). Alternatively, Muller et al (US Patent 6,493,884) teach a device for collection of urine, comprising a chamber with a funnel and reservoir (See abstract & Fig. 2); though Muller et al teach the collection device is for collecting urine, it would be within the purview of one skilled in the art to alternatively use it for semen collection. Consequently, the special technical feature which links Groups I-III, a semen collection device comprising a collection container, does not provide a contribution over the prior art, so unity of invention is lacking. The claims of Group III (claims 74-81 and 83) and Group IV (claims 84-89) lack this feature entirely, so there is no unity of invention between the claims of Groups I or II and the claims of Groups III or IV.

The special technical feature which links Groups III (claims 74-81 and 83) and Group IV (claims 84-89) is determined to be the kit comprising a surface for depositing semen, and means for analyzing the deposited semen. Claim 74, at least, is anticipated by or obvious over Ericsson et al (US Patent 5,055,411). Ericsson et al teach collecting semen samples and depositing the sample on a microscope slide, and analyzing the sample under a fluorescence microscope (See col. 11, ln 1-19). Consequently, the special technical feature which links Groups III and IV, a kit comprising a surface for depositing sperm and means for analyzing the deposited sperm, does not provide a contribution over the prior art, so unity of invention is lacking. The claims of Group I (claims 1-39, 50-57 and 82), Group II (claims 1 and 40-49), and Group III (claims 58-73) lack this feature entirely, so there is no unity of invention between the claims of Groups III or IV and the claims of Groups I-III.